SERIAL NO. 10/650,397   **PATENT**
                                    Docket RAL919990139US2

<u>**Amendments to the Claims:**</u>

1-13. (cancelled)

14. (Currently Amended) A computer readable medium containing a plurality of data

    structures for finding a ~~full~~ match for a variable length search key, comprising:

        a pattern or key that is to be searched;

        a direct table that stores a first address location for a search tree;

        a plurality of pattern search control blocks that each represent a branch

        in the search tree; and

        a plurality of leaves wherein each leaf is an address location for the result

        of a search <u>wherein said direct table is one of said plurality of data</u>

        <u>structures that is first accessed in conducting the search</u>.

15. (Currently Amended) The computer readable medium containing a plurality of

    data structures for finding the ~~full~~ match of claim 14 further comprising a lookup

    definition table that manages a tree search memory.

16. (Currently Amended) The computer readable medium containing a plurality of

    data structures for finding the ~~full~~ match of claim 15 wherein the lookup definition

    table comprises entries that define a physical memory that the tree resides in,

    a size of the key and leaf, and a type of search to be performed.

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17.   (Currently Amended)   The computer readable medium containing a plurality of

data structures for finding the ~~full~~ match of claim ~~14~~ 15 wherein the lookup

definition table is implemented in a plurality of memories.

18.   (Currently Amended)   The computer readable medium containing a plurality of

data structures for finding the ~~full~~ match of claim 14 wherein a format for a direct

table entry includes at least one of a search control block;   a next pattern

address that point to a next pattern search control block; a leaf control block

address that points to a leaf or result; a next bit or bits to test; and a direct leaf.

19.   (Currently Amended)   The computer readable medium containing a plurality of

data structures for finding the ~~full~~ match of claim 14 wherein a format for a

pattern search control block includes at least one of a search control block; a

next pattern address that point to a next pattern search control block; a leaf

control block address that points to a leaf or result; and a next bit or bits to test.

20.   (Currently Amended)   The computer readable medium containing a plurality of

data structures for finding the ~~full~~ match of claim 14 wherein a leaf data structure

includes at least one of a leaf chaining pointer; a prefix length; a pattern to be

compared to the search key; and variable user data.

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21.   (Currently Amended)   The computer readable medium containing a plurality of

      data structures for finding the ~~full~~ match of claim 18 wherein the direct leaf is

      stored directly in a direct table entry and includes a search control block and a

      pattern to be compared to a search key.

22.   (Currently Amended)   The computer readable medium containing a plurality of

      data structures for finding the ~~full~~ match of claim 14 wherein a pattern search

      control block is inserted in the search tree at a position where the leaf patterns

      differ.

23.   (Currently Amended)   The computer readable medium containing a plurality of

      data structures for finding the ~~full~~ match of claim 14 wherein a pattern search

      control block has a shape defined by a width of one and a height of one and is

      stored in a memory that has a line length of at least 36 bits.

24-45.   (canceled)

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